

Claims 1-18 are pending with the entry of this Amendment. Claims 1-18 stand rejected. A supplemental Oath or Declaration was requested. The Applicant submits the claims are in condition for allowance and the filed Declaration is proper.

The Office Action suggests that the Declaration is missing Post Office addresses. While the line label "Post Office Address" is blank, a Post Office Address including Zip Code is included on the "Residence" line for both inventors. Therefore the Applicant maintains the current Declaration and Power of Attorney filed July 26, 2000 is correct and a new Oath or Declaration will not be submitted.

Rejections under 35 U.S.C. §102

The Office Action rejected Claims 1-7, 17 and 18 as being anticipated by Degura et al. The Applicant submits this rejection is improper and should be withdrawn.

RE Claims 1-7

The Office Action suggests that "step (54, 56 and 58)[are] for determining the transmitter type (transmitter path) of the received signal". This is an incorrect reading of Degura.

Claim 1, and identically Claim 6, recites in pertinent part "determining transmitter type as a function of the detected chirp slope".

Degura, simply put, separates chirp symbols into separate channels. In Figure 6A and 6B Degura shows the transmission of symbol "1" and symbol "0 "pulses over separate channels. Degura further equate Figures 6A and 6B with Figures 12 and 13.

“The chirp conversion elements 54, 56 and 58 are fundamentally the same as the chirp conversion elements 43, 45 and 47” Col. 13, lies 25-27. The system of Degura separates and detects symbols by the slope of the chirp signal.

In no way can Degura determine transmitter type by chirp slope as alleged by the Office Action. Degura discloses no correlation between slope and transmitter type, in fact, all the chirps(whether sloped up, down or sideways) received in 54, 56, and 58 are multiplexed and sent from the same transmitter 51 as evident from Col. 13 lines 8-10, “An output of the adding unit 49 is input to amplifier 50 and is used to drive a proper transmitting apparatus, for instance, an E/O conversion unit 51”.

Degura does not show each and every feature disclosed in Claims 1 and 6, specifically “determining transmitter type as a function of the detected chirp slope”, therefore the rejection was improperly made and should be withdrawn. Likewise, the rejections of claims 2-5 and 7 which depend from Claims 1 and 6 respectively are improper and should with withdrawn irrespective of additionally patentable features recited therein.

RE Claims 17, 18

The Office Action suggests that Degura discloses a system having a first type of transmitting and receiving paths for transmitting and receiving a first chirp signal of a first predetermined slop and having a second type of transmitting and receiving paths for transmitting and receiving a second chirp signal having a different slope from the first predetermined slope, in the same place.

Claims 17 and 18 do not recite transmitting and receiving paths, they recite *inter alia* “having a first type of receivers and transmitters … and a second type of receivers and transmitters”. Each of the transmitters and receivers disclosed and envisioned by Degura are the same. Furthermore, Claims 17 and 18 are amended to include “wherein, information is encoded by duration of the chirp signal”. As discussed previously, Degura encode information by variations of the chirp slope.

Therefore, since Degura discloses only one type of transmitter and receiver and further doesn’t encode information in chip signal durations, Degura cannot anticipate Claims 17 and 18 and the rejections should be withdrawn.

Claim Rejections under 35 U.S.C. §103

The Office Action rejected Claims 8-16 as being unpatentable over Degura et al. The Applicants respectfully disagree.

The Office Action acknowledges that Degura does not disclose that the first predetermined frequency band is the same as the second predetermined frequency band but further concludes that it would have been obvious that one skilled in the art could implement Degura in such a way that the frequency bands are the same, and the data capacity of the system inherently is significantly increased without increasing the first predetermined frequency band.

The Applicant points out, there is no teaching in Degura regarding frequency band for transmitting and receiving the different chirp slopes. The conclusory statement that Degura could use the same frequency band, does little to provide the required teaching to provide a *prima facie* rejection. Therefore, as no other art is provided or cited within the rejection, the rejection has necessarily not provided a teaching reference and the rejection is improper and should be withdrawn.

Furthermore, as the data of Degura is encoded in the chirp signal slopes and not encoded as the duration of the chirp signal as recited in amended Claims 8 and 12, Degura can not show teach and suggest all the features in Claims 8 and 12. Furthermore, to modify Degura to encode information as in Claims 8 and 12 according to duration would defeat and render Degura useless for its intended purposes. Therefore any rejection of Claims 8 and 12 relying on Degura would be improper.

Additionally, Claims 9-11 and 13-16 depend from Claims 8 and 12 respectively, therefore the rejection of these claims are also improper and should be withdrawn, irrespective of the additional patentable features describe therein.

CONCLUSION

The Applicant submits that the Office Action's application of Degura in the rejections is improper at best and reflects an incomplete understanding of Degura and the present invention as recited in the claims. The Applicant has illuminated these differences and requests withdrawal of the rejections and allowance of Claims 1-18. The Applicant has also amended Claims 8, 12, 17, and 18 to further clarify these distinctions. The Applicant requests withdrawal of the rejections and allowance of Claims 1-18.

Respectfully submitted,



Mark C. Comtois Reg. No. 46,285
Attorney for Applicant

DUANE MORRIS LLP
1667 K Street, N.W., Suite 700
Washington, DC 20006
Telephone: (202) 776-7800
Telecopier: (202) 776-7801

Dated: July 7, 2003